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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/725,133	12/01/2003	Chang-Hun Lee	8071-42 (OPP 030497US)	2641
22150	7590	05/17/2007		
F. CHAU & ASSOCIATES, LLC 130 WOODBURY ROAD WOODBURY, NY 11797			EXAMINER CHEN, WEN YING PATTY	
			ART UNIT 2871	PAPER NUMBER
			MAIL DATE 05/17/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.



## DETAILED ACTION

### *Response to Amendment*

The Amendment filed on Feb. 9, 2007 has been entered. Claims 7 and 8 are cancelled and claim 39 is newly added per the Amendment filed. Therefore, claims 1-3, 5 and 9-39 are now pending in the current application, however, claims 21-37 are withdrawn from consideration.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

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the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 38 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta et al. (US 6266116).

Ohta et al. disclose in Figure 21 a liquid crystal display, comprising:

- a substrate;

- a gate line (element GL) formed on the substrate and extending in a first direction;

- a data line (element DL) intersecting the first direction;

- a first pixel electrode (element PX) formed in a pixel area defined by intersections of the gate line and the data line, the first pixel electrode formed substantially parallel to the gate line;

- a pixel signal line (element PL, as shown in the figure below) connected to the pixel electrode;

- a switching element (element TFT) connected to the gate line, the data line, and the pixel signal line;

- a first common electrode (element CT) formed in the pixel area parallel to the first pixel electrode;

- a common signal line (element CL) formed in the pixel area connected to the common electrode;

- a second pixel electrode (element PX) formed in the pixel area opposite to the first pixel electrode and connected to the pixel signal line; and

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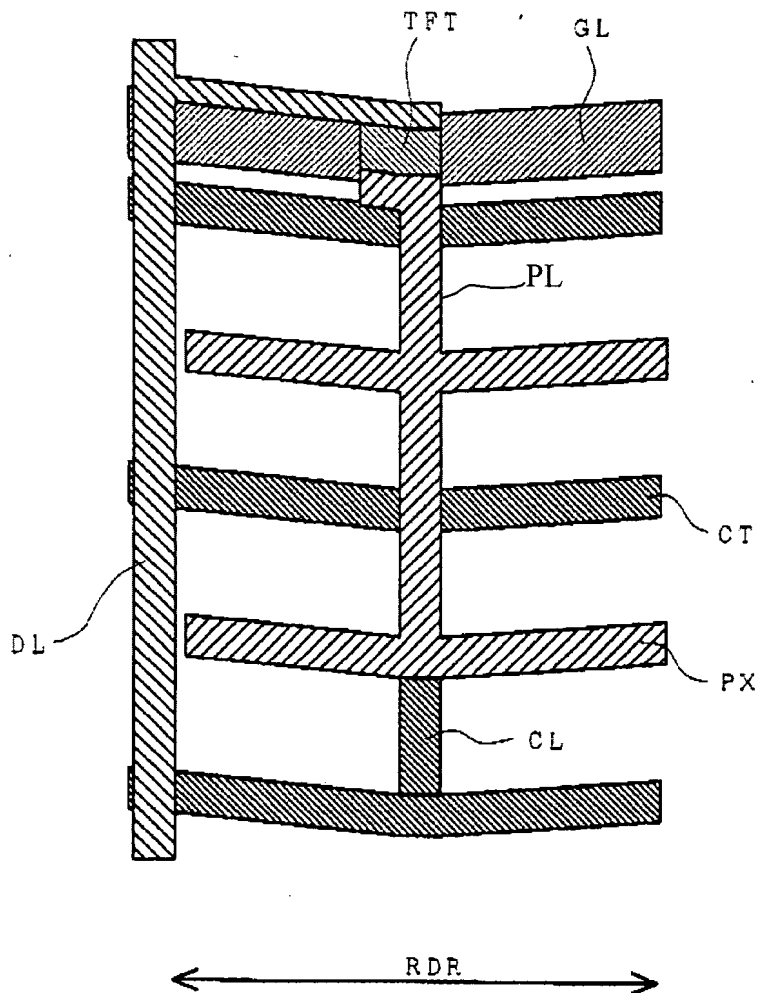
a second common electrode (element CT) formed in the pixel area, the second common electrode opposite to the first common electrode and connected to the common signal line.

Ohta et al. failed to disclose that an outermost electrode of the first pixel electrode, the pixel signal line and an outermost electrode of the second pixel electrode join together to form a trapezoid shape.

However, Ohta et al. in another embodiment as shown in Figure 7 and described in Column 21 lines 1-25, that the first pixel electrode and the second pixel electrode can be formed such that they tilt in opposite directions with respect to the pixel signal line, thus resulting in a trapezoid shape formed between the first and second pixel electrodes and the pixel signal line.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to construct a liquid crystal display as taught by Ohta et al. and further wherein the first and the second pixel electrodes are tilted in opposite directions with respect to the pixel signal line as shown in Figure 7, since Ohta et al. teach that by tilting the first and second pixel electrodes in opposite directions makes it possible to use two driving directions of the liquid crystal molecules in one picture element (Column 21, lines 26-28).

**FIG. 21**



***Allowable Subject Matter***

Claims 1-3, 5, 9-20 and 39 are allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 1 (Amended): None of the prior arts either along or in combination fairly teach or suggest a liquid crystal display wherein at least the first or second capacitor

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electrode is triangular in shape in addition to the recited limitations. Therefore, claim 1 is deemed non-obvious and inventive over the prior arts, thus is allowed.

As to claims 2-3, 5, 9-20 and 39 (New): Since claims 2-3, 5, 9-20 and 39 depend either directly or indirectly on the allowed claim 1, therefore, are also allowed.

### ***Response to Arguments***

Applicant's arguments with respect to claim 38 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to W. Patty Chen whose telephone number is (571)272-8444. The examiner can normally be reached on 8:00-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David C. Nelms can be reached on (571)272-1787. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

W. Patty Chen  
Examiner  
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WPC  
5/11/07

  
ANDREW SCHECHTER  
PRIMARY EXAMINER